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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,760	11/12/2003	James R. Mault		7394

53186 7590 10/17/2007
COURTNEY STANIFORD & GREGORY LLP
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SAN JOSE, CA 95157

EXAMINER

NATNITHADHA, NAVIN

ART UNIT	PAPER NUMBER
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3735

MAIL DATE	DELIVERY MODE
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10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/712,760

Applicant(s)

MAULT, JAMES R.

Examiner

Navin Natnithithadha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 48-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims 48-51, 55-56, 58, and 64 have been amended. Claims 1-47 and 72-79 have been cancelled. Claims 48-71 are pending.

Priority

2. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 129(e) as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed applications, Application Nos. 60/073,812 and 60/104,983, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application.

These two prior-filed applications fail to provide adequate support for the subject matter related to a "U-shaped, removable flow tube".

Response to Arguments

3. Applicant's arguments with respect to claims 48, 51-58, 61-65, 67, and 69-72 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's arguments with respect to claims 49, 50, 59, 60, 66, and 68 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 48, 51-58, 61-65, 67, and 69-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Binder, US 4,368,740 A ("Binder").

Claims 48, 51-58, 61-65, 67, and 69-79: Binder teaches an indirect calorimeter (see Abstract), comprising: a mask 3; a flow tube housing 13; a flow meter 6 integrally formed in flow tube housing 13; an oxygen sensor 10 coupled to flow tube 13 and configured to generate an output associated with a concentration of oxygen in exhaled and inhaled gases (see col. 4, ll. 26-30); a computation unit 96 configured to: process the output of the flow meter 6 to determine the volume of inhaled and exhaled gases, process the output of the oxygen sensor 10 to determine the concentration of oxygen in inhaled and exhaled gases, determine an amount of oxygen consumed (VO₂) 107 and amount of carbon dioxide produced (VCO₂) 94 (see figs. 1-2), determine a respiratory quotient (respiratory exchange ratio, R) 108, and determine a respiratory parameter

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(VO₂, VCO₂, R); a respiratory connector/mask 3 coupled to the flow tube 13; a display unit 126; wherein the computation unit is configured to initiate a measurement cycle upon the occurrence of a trigger event, wherein the trigger event is selected from the group consisting of: detection of a manual switch being set to a pre-defined position ("User input devices 128 include keyboards and the like for inputting data concerning the test subject and for inputting on-line control commands to the processor 116", see col. 10, ll. 25-32). In addition to Binder's teaching of the computation unit "configured to initiate a measurement cycle upon the occurrence of a trigger event, wherein the trigger event is selected from the group consisting of: detection of a manual switch being set to a pre-defined position", a typical on/off switch that is necessary to power on/off any conventional medical monitoring device would read on this limitation. It would be inherent for Binder's device to have an on/off switch in order to deliver or shutoff the power to the device.

Binder does not teach a "U-shaped removable flow tube". However, Cook teaches a respiratory monitoring device (see Abstract) comprising: a U-shaped removable tube 2 ("disposable" "U-shaped enclosure", see fig. 1 and col. 4, l. 32). having a first end 11 coupled to a mask 11, an elongated measurement section 5, and a second end 23 that is open (see figs. 1 and 2). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Binder's device to have a U-shaped removable flow tube, as taught by Cook, in order to provide a low cost testing apparatus that may be made disposable after use (see Cook, col. 1, ll. 36-38).

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6. Claims 49, 50, 59, 60, 66, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Binder in view of Cook, as applied to claims 48, 58, 65, and 67 above, and further in view of over Harnoncourt et al, US 5,503,151 A ("Harnoncourt").

Claims 49, 50, 59, 60, 66, and 68: Binder does not teach an ultrasonic flow meter or a fluorescence quench oxygen sensor. However, both these types of sensors are well known in the art. For example, Harnoncourt teaches an apparatus 10 for measuring the parameters of respiratory gases (see fig. 1), comprising: a respiratory tube 12, ultrasonic flow sensor 22, and fluorescence quench oxygen sensor 28 (see col. 2, ll. 46-57, col. 4, ll. 5-10 and 16-30). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Binder with Harnoncourt's ultrasonic and fluorescent sensors because Harnoncourt suggests that "[f]rom the primary parameters measured using the apparatus in accordance with the invention it is possible for derived quantities, such as for example oxygen uptake, CO.sub.2 release, the respiratory quotient, the vital capacity, the respiratory volumetric flow rate, the respiratory work and the like, to be calculated" (see Harnoncourt, col. 3, ll. 33-41).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The other patents cited in the PTO-892 teach subject matter related to the Applicant's claims. The Examiner suggests reviewing these patents before responding to the present Office Action.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navin Natnithithadha whose telephone number is (571) 272-4732. The examiner can normally be reached on Monday-Friday, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II, can be reached on (571) 272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Navin Natnithithadha
Patent Examiner
Art Unit 3735
10/04/2007


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